Reducing and Recovering Surplus Food*

Surplus food can be beneficially used in a variety of ways. The food recovery hierarchy prioritizes methods of reducing food waste.

Assess your food waste: Take a quick look at the food you are throwing away and identify potential food recovery opportunities to decrease the amount you generate.

Conduct food waste audit**: For more detailed information, track and collect data on the types and amounts of each food waste item you are generating. Collecting this data will help determine if some food waste can be reduced by ordering or producing less, how much could be sent to food banks or shelters, and how much could be recycled through animal feeding, rendering, or composting.

Plan for costs: Talk to national waste organizations, haulers, town planners, recycling coordinators, and even the mayor or town manager to get support and assistance for your food recovery program. Employee training is also vital to the success of a food waste recovery program. You might want to consider an incentive program for employee participation.

Decide what food recovery option works best: Use the information gathered from your waste assessment and audit to determine which food recovery option is best for your organization. The quality of your surplus food and your estimated generation rate will help you consider how to divert food waste. To learn about disposal options and find haulers in your area, visit your state or county environmental department’s Web site. You can also ask your current recycling or waste hauler about hauling your food waste to a recovery facility.

Source Reduction: Use your waste audit to identify ways to decrease the amount of food waste you generate. Are there any trends in the types and amounts of food waste you produce? If so, consider changing your business operation to buy only what you use.

Feed Hungry People – Donate extra food to food banks, soup kitchens, and shelters

Feed Animals – Divert food scraps to animal feed

Industrial Uses – Provide waste oils for rendering and fuel conversion; and food scraps for digestion to recover energy

Composting – Create a nutrient-rich soil amendment

Landfill/Incineration – Last resort for disposal

Feed People: You can donate unsold or excess food products that meet quality and safety standards to food banks. Many national and local food recovery programs offer free pickups and containers. The Bill Emerson Good Samaritan Food Donation Act (Public Law 104-210) protects food donors from legal liability. The text for this act is available through the U.S. Department of Agriculture’s website.

Feed Animals: Determine if local farmers or zoos use food scraps as animal feed. There are laws and regulations protecting animals from contracting diseases through consumption of food scraps. Contact your county agricultural extension office, your state veterinarian, or your county health department to find out about specific state regulations and contact information for licensed farmers. You also might find companies that convert food scraps into animal food products.

Industrial Uses/Rendering: Fat, oil, and grease can be rendered into a raw material to make biodiesel, soaps, and cosmetics. Anaerobic digestion of food scraps and waste oils produce biogas that can generate heat and electricity, fiber that can be used as a nutrient-rich soil conditioner, and liquor that can be used for fertilizer.

Composting: Food scraps can be composted. Ask the composting facility for a list of acceptable materials and hauling options. Another option is to compost on site. Before beginning such an operation, be sure you have adequate space, staff, and users, and support and cooperation from business or residential neighbors. Contact your local or state environmental agency to find out more about composting options in your area and more information on special issues that apply. Learn more about the science and technology of composting, including various methods, at http://www.epa.gov/waste/conserve/composting/.

** What is a food waste audit? The first step to reducing and recovering surplus food is to identify the types and quantities of surplus food that is either already donated or goes to waste or in the trash. There are some food wastes, like produce trimmings that can’t be avoided, but are not suitable for human consumption. Trimming can often be diverted to feed animals.

Why audit? What gets measured usually then gets managed and often reduced. Reducing surplus waste at the source generally saves industry money in material, labor and waste hauling.

Get started. Use the checklist on the next page (or reverse) to begin the food waste audit. There are two types of surplus food, pre-consumer and post-consumer, often called plate waste. This food waste audit checklist will focus on pre-consumer wastes and practices. Then, use the food waste log to record specific food waste details and quantities. Depending on the type of surplus food, this audit may be very specific or somewhat general.

*Graphic and text duplicated in part from EPA source found at www.epa.gov/osw/conserve/pubs/food-guide.pdf.
Food Waste Audit—Surplus Food Checklist

Plan the audit

- Appoint a champion to drive the planning process and lead the audit, as well as the post-audit analysis.
- Obtain and review dumpster waste records to compile baseline data on tonnage and fees.
- Select a time period (one to seven days) for the audit that reflects normal operating conditions. Avoid holidays and adverse weather days as such influences may skew data.
- Decide how often to audit, how much data to collect, and what will be measured; then determine a data recording method. PPI can provide assistance for weighing and recording data.
- Determine and communicate the level of staff involvement needed, their assigned roles, and what you want to get out of the audit findings.
- Set up a waste audit location. Be sure you have planned out the measurement process so results can be consistently gathered and recorded.

Do the audit

- On the day of the audit, let staff know what you plan to do. This could involve posting signage announcing the audit.
- Remove garbage bins from less visible areas and label all bins: “No food waste - all waste must be recorded.”
- If possible, place your scale and cleaning towels at the planned audit location.
- Set up your tracking system (PPI can provide a spreadsheet for recording data OR you can set up an automated tracking system).
- For restaurants and cafeterias only, record the number of meals served as well as total sales during the audit time frame.
- Estimate the percentage of total waste captured—was it a complete effort? For example, did the audit capture 100% of the food waste or just 30%?

Evaluate the audit findings

- Add up audit totals (lbs), ideally by food type and also by reason for the loss. Be sure to deduct the total tare weight of the pan used if necessary.
- Estimate total loss in dollars using $1.10/lb as a blended price for food waste, unless you are able to track waste more accurately and can use your own cost/lb value.
- Calculate summary data to create a post-audit report.
- Identify trends and actionable strategies.

Act on the findings

- Communicate your audit findings to staff.
- Determine what practices need to change and prioritize source-reduction activities.
- Set deadlines, then plan meetings to evaluate progress on action items.
- Document successes and set goals for continuous improvement.

Information adopted in part from EPA Food Recovery Challenge and LeanPath public resources available at www.epa.gov/epawaste/conserve/foodwaste/index.htm